

REMARKS

As set forth hereinabove, Applicants have cancelled claims 11-17 with claims 3-8 remaining in the application for further prosecution. Claim 5 has been amended to eliminate possible ambiguity by stating that it is the suction port which is closed by the slide block when the slide block is moved into the closing position.

Independent claim 3 and claims 4 and 8 depending therefrom are rejected under 35 U.S.C. § 103 as unpatentable over the Takashi JP 08-258059 (hereinafter "Japanese '059 patent") in view of Hughes U.S. Patent No. 5,132,063 (hereinafter "Hughes '063 patent") and further in view of Kataoka U.S. Patent No. 6,033,607 (hereinafter "Kataoka '607 patent").

The Office Action states that the discussion of the Japanese '059 patent and the Hughes '063 patent is as set forth in the prior Office Action of October 7, 2003. The Office Action acknowledges that it is unclear in the disclosure of the Japanese '059 patent how a fragmental filler is supplied into the cavity of the molding device. It is asserted that it would have been obvious in the art to provide a supply port in the molding process taught by the Japanese '059 patent, as such is exemplified by the teachings of the Kataoka '607 patent, which employs exhausters 9, 11 as depicted in Figs. 2b and a blower 4 to create an air flow to distribute filler in a mold. As will be seen, however, the Kataoka '607 patent does not supply teachings of the method steps of independent claim 3, which are acknowledged to be missing from the Japanese '059 patent.

Initially, combination of the Japanese '059 and the Hughes '063 patent is deficient and improper for the reasons set forth in Applicants' Amendment A commencing at the bottom of p. 17 and continuing to the middle of p. 19, which is incorporated herein by reference. In significant part, that discussion points out that independent claim 3 recites the driving of the pumping source to produce air flow from the supply port to the inside of the skin layer through said opening in the skin layer and from the inside of the skin layer to a suction port and the supplying of a predetermined amount of the filler to the inside of the skin layer by use of the air

flow to form the padded body. The prior Office Action admitted that the Japanese '059 patent does not employ air flow to supply filler to the inside of the skin layer, as is evident from the drawings. Further, the Hughes '063 patent does not supply such a teaching. The Hughes '063 patent merely indicates that where trim cover 55 is air permeable, vacuum can be used to facilitate expansion of the foam composition 85. It is clear that the foam composition 85 is poured into the mold, as is depicted in Fig. 3 of the drawings and the related description. There is absolutely no teaching or suggestion in the Hughes '063 patent of using air flow to supply filler to the inside of a skin layer disposed in a mold, as Applicants' claim language clearly requires. In fact, it would not appear to be possible to employ air flow to supply the filler in the Hughes '063 patent, since a liquid polymeric composition is employed. Thus, independent claim 3 clearly distinguishes over the asserted combination of the Japanese '059 patent and the Hughes '063 patent.

It is also significant that, as shown in Figs. 2 of the Japanese '059 patent, a sheet 4 is positioned on the mold 6 when the inside of the mold is exhausted through a plurality of small ports 10'. The sheet 4 is deformed as an inverted shaped mushroom and fitted to the interior surface of the open mold 6 (Fig. 3). If the exhaust stops were to stop, the deformed sheet would return to its original position. Therefore, a skin layer formed in a bag shape is not prepared in the Japanese '059 patent, as independent claim 3 requires. As shown in Fig. 4 of the Japanese '059 patent, when the predetermined amount of filler is supplied to the deformed sheet 4, the filler overflows the sheet 4, such that a padded body is not formed. Rather, lid mold 9 is air cylinder actuated to press the overflowing filler into the deformed sheet material 4. The use of air flow to supply filler into a skin layer formed in a bag shape is in no way contemplated by the Japanese '059 or the Hughes '063 patent.

The Kataoka '607 patent does not supply the deficiencies with regard to the process steps of claim 3, which are not present in the Japanese '059 patent and the Hughes '063 patent. The Kataoka '607 patent deals with the distribution of a filler into a mold effected by air flow created by suction pumps 9 and 11 in conjunction with a blower 4 supplying the material. The cushion member which is formed in the

Kataoka '607 patent is a fiber mixture with a binder which forms a cushion member that does not possess a skin layer. Thus, the Kataoka '607 patent does not contemplate the steps of preparing a skin layer formed in a bag shape, let alone a skin layer having a porous part and an opening for supplying the filler material. The teaching of supplying a cushion member by the Kataoka '607 patent constitutes the type of prior art which would require later insertion of the cushion body formed of filler in the inside of a skin layer formed in a bag shape. This requires the difficult and time-consuming step of inserted the cushion member into a skin layer while compressing the cushion body. It is this processing which Applicants' invention is designed to overcome, as pointed out, for example, at p. 7 of Applicants' specification in the first paragraph of the best mode for carrying out the invention.

In addition, the Kataoka '607 patent is deficient in that it does not teach the "supplying of a predetermined amount of said filler to the inside of said skin layer by the use of said air flow to form the padded body." This is not possible in the Kataoka '607 patent for the reason that there is no skin layer within the mold, rather, the process contemplates merely forming a cushion member which must be later inserted within a skin layer to form a completed padded body. Similarly, driving of the pumping source to produce air flow from a supply port into "the inside of the skin layer through said opening in the skin layer and from the inside of the skin layer to the suction port is not taught or suggested to the absence of a skin layer in the molding process of the Kataoka '607 patent.

It is submitted that even with the combination of processing steps from three different references, as constructed by the Office Action, this rejection does not and cannot produce the method steps of independent claim 3. Accordingly, independent claim 3 clearly patentably distinguishes the teachings of the three references relied upon in rejecting claims 3, 4 and 8.

Claim 4 also patentably distinguishes the applied prior art in reciting "setting the padded body in a molding container having a predetermined cavity". Since the deformed sheet of the Japanese '059 patent would return to its original position if the exhaust stopped at the end of the filling process, the padded body could not be

transferred to a holding container from the padding container because the sheet material would not retain its shape upon removal from the suction influence in the mold. The Hughes '063 patent and Kataoka '607 patent do not supply this processing deficiency of dependent claim 4.

Claim 5 is rejected in paragraph 8 of the last Office Action as unpatentable over the references set forth in numbered paragraph 6 as applied to claim 3 and further in view of Yamaguchi U.S. Patent No. 6,096,249 (hereinafter "Yamaguchi '249 patent"). Since claim 3 is not rejected in paragraph 6 of the Office Action, but rather in paragraph 7, it is assumed that the references of paragraph 7 rejecting claim 3 are intended. Accordingly, claim 5 is evidently rejected based upon the Japanese '059 patent in view of the Hughes '063 patent, further in view of Kataoka '607 patent and still further in view of the Yamaguchi '249 patent.

Since independent claim 5 contains all of the limitations of claim 3, that Applicants have addressed above in regard to the rejection of independent claim 3, it is submitted that claim 5 is patentable for the reasons set forth above in regard to claim 3, which is incorporated herein by reference.

Claim 5 additionally provides for a molding container having a slide block movable between closing and opening positions. The slide block moves to the closed position to define a cavity of predetermined shape and simultaneously closing the suction port which, with the supply port, provides the predetermined filler to the inside of the skin layer of the padded body. This is the embodiment of the invention in Example 2 commencing at p. 11 of Applicants' specification.

The Office Action indicates that the Yamaguchi '249 patent in Fig. 2b shows a suction port being closed by a slide block as it moves to a closing position. In the Yamaguchi '249 patent, the discontinuance of the air flow introducing the filler material is effected by the blowing port E from the duct 5 being closed in an unspecified fashion. (See Yamaguchi spec. at col. 9, ll. 24-30). Further, as can be seen in Fig. 2a, initial incremental closing of the mold sections 6 and 8, as takes place subsequent to the filling operation, does not, in fact, close the suction port, which is the bypass channel R as communicating with air sucking exhaustion fan 16. Thus,

the suction port closing function set forth in independent 5 is not expressly taught by the Yamaguchi '249 patent and no reason exists for incorporating such a teaching in the Japanese '059 patent in any instance. In essence, the mere necessity for accumulating features and unrelated teachings from four different patents strongly supports the patentability of independent claim 5 over this rejection.

Independent claim 6 and dependent 7 are rejected in paragraph 9 of the Office Action as unpatentable over the references set forth in numbered paragraph 6, as applied to claim 3 above and further in view of Gill U.S. Patent No. 5,482,665 (hereinafter "Gill '665 patent"). Since claim 3 is not rejected in paragraph 6 of the Office Action, but rather in paragraph 7, it is assumed that the references of paragraph 7 rejecting claim 3 are intended. Accordingly, claims 6 and 7 are evidently rejected based upon the Japanese '059 patent in view of the Hughes '063 patent, further in view of the Kataoka '607 patent and still further, in view of the Gill '665 patent.

Since independent claim 6 contains all of the limitations of claim 3 that Applicants have addressed above in regard to the rejection of independent claim 3, it is submitted that claim 6 is patentable for the reasons set forth above in regard to claim 3, which is incorporated herein by reference. Claim 6 is directed to the embodiment of the invention discussed in Example 3, commencing at p. 13 of the instant application and depicted in Fig. 12 of the drawings.

Claim 6 defines an arrangement wherein there is a premolding container provided inside a suction container, with filler supplied to the inside of the skin layer by means for removably connecting a source outside the suction container through an inlet port therein to a supply port in the premolding container where the opening in the skin layer is positioned. A suction port or ports are appropriately positioned in the premolding container to locate the filler material so that it is equally distributed with respect to the configuration of the skin layer.

The Office Action indicates it would have been obvious to provide a telescoping injector because the Gill '665 patent teaches providing a telescoping injector to a filling tube in order to evenly distribute fibers to a cavity of a molding device. It is

further indicated that a telescoping injector is taken to be removable from a filling tube and an entry port because it is a distinct and independent component.

As seen and described in the Gill '665 patent, the injector 8 is moved relative to the female mold member 22 for purposes of effecting an even or otherwise contemplated distribution of the filler material into the female mold section. The process of the Gill '665 patent contemplates use of only a single mold into which the filler is initially deposited and subsequently heated and cooled to produce a cushion element without a skin.

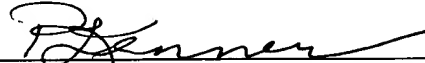
Gill does not employ the movable injector 8 to connect between an input port to a suction container and a supply port of a premolding container which is positioned therein. There is no container-within-a-container relationship or the driving of a pumping source to produce air flow through a suction container into a premolding container to a skin layer deposited therein. Thus, there is no setting of a skin layer in a premolding container which is provided inside a suction container, as specified in the steps of independent claim 6. Nor does the Gill '665 patent contemplate driving a pumping source to produce airflow from an input port in a suction container to a supply port through a premolding container to an opening in a skin layer fitted to the supply port, as expressly required as a step of independent claim 6. Nor is there a teaching or suggestion of setting a padded body in a molding container, as a third container employed in the process.

Summarily, there is no suggestion in any of the four references employed in the rejection of claim 6 of an arrangement involving utilization of two containers with a premolding container inside a suction container which are interrelated with the skin layer within the premolding container by the funnel or means for connecting the ports thereof, such that driving a pumping source produces air flow to the inside of the skin layer to supply filler thereto. It is submitted that there are multiple reasons in regard to both the limitation of claim 3 in claim 6 and the removable funnel functions, as incorporated in claim 6 which are not present and cannot be deemed to be obvious in view of the applied references.

Application No.: 09/857,892
Corrected Amendment dated: January 3, 2005
Reply to Office Action of May 5, 2004

In view of the above amendments to the claims and related discussion reconsideration and favorable action on claims 3-8 is earnestly solicited.

Respectfully submitted,



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Date: January 3, 2005